

# MONTHLY WEATHER REVIEW,

## JUNE, 1878.

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WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

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### INTRODUCTION.

In compiling the present REVIEW the following data, received up to July 13th, have been made use of, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 114 Signal Service stations and 12 Canadian stations, as telegraphed to this office; monthly journals and means, 119 and 135 respectively, from the former, and monthly means from 13 of the latter; reports from 25 special Sunset stations; 240 monthly registers from Voluntary Observers; 49 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports of the Weather Services of the States of Iowa and Missouri; reliable newspaper extracts; special reports.

### BAROMETRIC PRESSURE.

Upon chart No. II is shown the general distribution of the atmospheric pressure for the month by the isobaric lines. Compared with the means for June of previous years, the pressure for the present month averages lower in the Gulf and Atlantic States, and slightly higher in the Northwest and Upper Lake region.

*The Local Barometric Ranges*, as reduced to sea-level, for the month, vary as follows: New England, from 0.70 of an inch at Burlington to 0.96 at Eastport; Middle Atlantic States, 0.65 at Lynchburg to 0.75 at Philadelphia; South Atlantic States, 0.50 at Jacksonville to 0.61 at Cape Lookout; Gulf States, 0.25 at Key West to 0.45 at Mobile, 0.29 at Galveston and 0.56 at Jacksboro, Texas; Ohio valley and Tennessee, 0.50 at Memphis to 0.80 at Pittsburg; Lower Lake region, 0.64 at Oswego to 0.74 at Toledo; Upper Lake region, 0.64 at Chicago to 0.90 at Marquette; Upper Mississippi valley, 0.57 at St. Louis to 0.77 at St. Paul; Red River of the North valley, 0.61 Pembina to 0.76 at Breckenridge; Missouri valley, 0.59 at Bismarck to 0.67 at Omaha; Plains of Nebraska and Kansas, 0.72 at Dodge City to 0.76 at North Platte; Rocky Mountain region, 0.30 at Santa Fe to 0.54 at Denver; between Rocky Mountains and Pacific States, 0.28 at Pioche to 0.46 at Boise City; Pacific States, 0.21 at Campo, Cal., to 0.59 at Portland, Or.

*Areas of High Pressure*—Of these, nine are described. But one, No. II, was of decided interest, in that it produced destructive frosts on the 6th and 7th.

No. I.—This is a continuation of the high-pressure area described in the MAY REVIEW as No. VI. 1st, in the morning it was central in New England, with northeasterly winds and generally clear weather; minimum temperature on Mt. Washington, 34° Fah.; at Portland and Eastport, highest barometer, reduced to sea level, 30.29 in., or 0.33 in. above the normals. During the day it moved eastward off the coast. 2nd, the pressure rapidly diminished in New England, as it withdrew to the eastward; p. m. barometer at Halifax 30.12, or 0.29 above the normal.

No. II.—1st, prevailed over California, with clear weather; p. m. barometer at San Francisco, 30.11, or 0.16 above normal. It extended north and eastward toward Oregon and Utah during the day. 2nd, it was probably central in Utah by midnight, with barometer at Salt Lake City 0.13 above normal. During the night the temperature on Pike's Peak fell to 16°. 3rd, it continued advancing eastward; by midnight it covered the country from the Rocky Mountains to the Missouri valley; barometer at North Platte, 0.23 above normal. The minimum temperatures indicated frosts as far southward as the northern portions of

Arizona and New Mexico the past three mornings; min. temperature  $35^{\circ}$  at Cheyenne. 4th, frosts evidently occurred from Wyoming northward, and in northern portions of Dakota and Minnesota; minimum temperature at Pembina,  $37^{\circ}$ . By afternoon it was central in the Red River of the North valley; barometer at Pembina 30.17, or 0.35 above normal. 5th, the frost-area probably reached from northeastern Dakota to northern Michigan. The highest pressure covered the Lake region, with cool, clear weather; p. m. barometer at Marquette 30.19, or 0.33 above normal. 6th, morning, it was central over the Lower Lakes. Minimum temperature at Rockliffe, Canada,  $30^{\circ}$ ; with frosts from thence toward Michigan and the interior of the Middle States. At Bradford, Pa., heavy frosts are reported to have occurred. During the day the pressure rapidly diminished in advance of storm No. II. 7th, highest pressure in northeastern New York. Morning, minimum temperature on Mt. Washington  $15^{\circ}$ ; Littleton, N. H.,  $26^{\circ}$ ; Quebec,  $35^{\circ}$ ; Burlington,  $37^{\circ}$ . In Massachusetts, New Hampshire, Vermont and northern New York heavy frosts occurred, destroying potatoes, corn, vines, &c. It disappeared during the day.

No. III.—9th, developed over the Northwest. 10th, a. m. barometer at North Platte and Dodge City, 0.14 above normal. It extended southeastward during the day, and, by midnight, was central in Arkansas. 11th, advanced to the Eastern Gulf States, but with the pressure only slightly above the normal. 12th, apparently dissipated.

No. IV.—11th, apparently advanced southeastward over Manitoba. 12th, it reached the Lake region, with cool, clear weather and northerly winds; midnight barometer at Marquette 30.21, or 0.32 above normal, and following morning 30.28, or 0.38 above. 13th, continued extending southeastward toward the Atlantic coast, but still highest over the Upper Lakes. 14th, by midnight, highest along the Middle Atlantic coast. 15th, it gradually disappeared in advance of storm No. V.

No. V.—14th, developed in the Rocky Mountain region, with minimum temperatures from Montana to western Dakota indicating light frosts; p. m. barometer at Virginia City and Salt Lake City, 0.18 above normals. 15th, advanced toward the Lower Missouri valley; a. m. barometer at North Platte, 0.17 above normal. 16th, extended to the Upper Lakes and Manitoba. 17th, central over the Upper Lakes; p. m. barometer at Marquette, 0.19 above normal. 18th, under the influence of low pressure areas VI, VII and VIII, the pressure diminished, but continued highest in the Lake region, with a barometric ridge running from NE. to SW. 19th, it was dissipated.

No. VI.—18th, apparently developed in New Mexico. 19th, extended northward and probably united with a second advancing southward; midnight barometer at Denver 30.24, or 0.23 above normal. 20th, progressed eastward toward the Lower Missouri valley. 21st, by midnight was central in Minnesota; barometer at Duluth and St. Paul 0.13 above normal. 22nd, continued as a barometric ridge running from Minnesota to northern Texas, and the following day throughout the Mississippi valley. 24th, moved to the Gulf States. 25th, to the South Atlantic coast. 26th and 27th, continued on that coast with increasing pressure. 28th, a. m. barometer at Wilmington 30.27, or 0.20 above normal, after which the pressure gradually diminished to the close of the month.

No. VII.—23rd, appeared in Oregon. 24th, it rapidly extended southeastward; a. m. barometer at Portland 30.32, or 0.21 above normal. 25th, the pressure was highest from Oregon to western portions of Kansas and Nebraska. 26th, central in the Lower Missouri valley, and then lost its identity, on account of No. VI, then central on the South Atlantic coast and decidedly the more prominent of the two.

No. VIII—was of little interest. 28th, appeared north of the Lower Lakes. 29th, a. m. barometer at Rockliffe 30.27; and then rapidly disappeared.

No. IX.—28th, advanced southeastward over Oregon; midnight barometer at Portland 30.29, or 0.20 above normal. 29th, moved eastward toward the Missouri valley. 30th, by midnight was central in Nebraska and southern Dakota; barometer 0.22 above normal at North Platte.

*Areas of Low Pressure.*—Ten of these have been sufficiently well marked to be charted. The storm described in the May Review as No. XIV, continued, on the 1st, along the coast from southern New England to North Carolina, but with increasing pressure. Northeast to southeast gales prevailed north of Chesapeake bay, and northeast to northwest gales thence southward. 2nd, the winds gradually diminished to brisk. Cautionary Signals were hoisted May 30th from North Carolina to New Jersey, and, May 31st, along the New England coast; all justified except on coast of Maine. Maximum hourly velocities:—Kittyhawk, NE. 37; Cape Henry, NW. 36; Atlantic City, NE. 52; Barnegat, NE. 56; New Haven, NE., Wood's Holl, E. and Boston, NE., 32 miles.

No. I.—1st, threatening and rainy weather prevailed from Utah and Montana to Missouri, Illinois and Wisconsin, with frequently heavy thunder-storms in the Northwest. In the morning the area of low pressure lay from W. to E., but by night changed so as run to from N. to S.; midnight bar. at Omaha, 29.51, or 0.30 below normal. A tornado formed in western Missouri, between 2 and 3 p. m. A dense, muddy-looking, funnel-shaped cloud, obscuring everything beyond, was observed over the Missouri river about  $1\frac{1}{2}$  mile below Missouri City, (about 14 miles W. of Richmond;) at same time another cloud was observed to the westward, distance between the two clouds about 2 miles; they passed off to the northeast, with a noise like that of a heavy freight train when running, and in the distance appeared to unite in one immense cloud and descend; day intensely sultry. As it approached Richmond, an observer states that the "two

dense, black, funnel-shaped clouds appeared to unite, with small end down, objects were drawn upward and then scattered broadcast; it moved slowly." As it entered the city, about 4:05 p. m., from the south, it passed over the "Conservator" printing office, where it hung for several seconds with a violent rotary motion, and then moved a little towards the south; it then passed direct north through city, sweeping everything clean; heavy sills, eighteen inches square and sixteen feet long, were taken from the foundations of buildings and carried away; trees in every instance were twisted in a direction against the hands of a watch and hurled from west to east. The post-office was entirely swept away and letters have since been returned from places twelve miles distant. On the east side the line of destruction was almost straight, while on the west it was looped and jagged; this "looped" formation was particularly noted. Its path through the city was about 250 yards or three squares wide and one mile long, in which space not a single house was left standing; this distance was traversed in less than five minutes; no rain fell during its passage, but it was preceded by a few minutes heavy rain; ascending and descending currents were noticed. At the Old cemetery, (on northern margin of city,) every tombstone was levelled, and many were broken to pieces; the grass was scorched as if by fire. It then rose from the earth but descended two miles distant at Crooked river, where an iron bridge was doubled and twisted up, persons injured and buildings carried away for two miles beyond. It passed over Morton, (in eastern portion of Ray Co.,) and again descended at Highsinger's, near Ray and Carroll Co. line. In Carroll Co. its course appeared to change from N.E. to S.E., being seen from Carrollton, where immense hailstones fell, containing, at their centre, mud and grass; it was also observed from Norborne, and in Prairie township destroyed 13 houses. In Richmond over 100 buildings were destroyed, 13 persons killed and about 70 injured. A tornado also formed between 4 and 5 p. m., about six miles west of Clark's, (on the U. P. railroad,) Nebraska, and about one-half mile south of railroad track; passed from N. W. to S. E., demolished several buildings, and disappeared over the Platte river; lasted 20 minutes, and is described as a black column. At Adair, Iowa, during the afternoon, houses were blown down, two persons killed and several injured; in Guthrie county, (next north of Adair,) great damage to building and crops by wind-storm. At Milwaukee, during p. m., very severe thunder-storm from south, during which ball lightning did much damage; telegraph lines were affected. 2nd, the central pressure continued diminishing; midnight bar. at Breckenridge 29.38, or 0.39 below normal. Rainy weather prevailed from the Northwest to the Lakes, with heavy wind and thunder-storms, especially in Iowa, where floods followed. 3rd, as it passed into Canada, generally light rains fell in the Lake region, with high winds and gales. The three following days, the central depression passed north of the limit of the stations, but a barometric trough reached southward into the Gulf States, in which frequent thunder-storms occurred, with high winds and gales from North Carolina northward. Cautionary Signals were ordered the 1st along Lakes Michigan and Superior; 2nd, Lakes Huron and Erie; 3rd, Lake Ontario; 5th, from North Carolina to Maine, except Connecticut, and very generally justified. Maximum velocities:—Denver, S. 48; North Platte, N.E. 72; Omaha, S.E. 33; Breckenridge, N.E. 32; Bismarck, N.W. 36; Duluth, N.E. 40; Milwaukee S.E. and S.W. 36; Alpena, W. 28; Sandusky, N. 34; Rochester, W. 28; Cape Lookout, N.E. 86; Kittyhawk, N. 38; Cape May and Sandy Hook, N.W. 36; Boston and Thatcher's Island, N.W. 32; Mt. Washington, N.W. 60; Father Point, W. 34 miles.

No. II.—6th, this storm developed in the Northwest, with rainy weather and thunder-storms thence to Upper Lakes. On Pike's Peak light snow fell throughout the day. 7th, the central pressure rapidly diminished; midnight bar. at Louisville 29.55, or 0.38 below normal. Frequent rains were reported from the Upper Lakes to the Gulf and South Atlantic States. In Texas, as the winds shifted to northerly during the night, they increased to gales at many places. 8th, the rain-area extended to the Atlantic coast, with severe thunder-storms, increasing winds, heavy squalls, and lower pressure; near Fayetteville, N. C., a destructive hail-storm. Midnight bar. at Atlantic City 29.43, or 0.58 below normal. 9th, it rapidly moved northeastward over Nova Scotia. Signals were displayed the 6th along Lakes Superior and Michigan; 7th, Lakes Huron, Erie and Ontario; 8th, along coast from North Carolina to Maine. The majority of those on Lakes Huron and Ontario and the New England coast were not justified. Maximum velocities:—Denver, N. 36; Indianola, N.E. 43; Knoxville, S.W. 30; Duluth, N.E. 30; Sandusky, N.E. 30; Tybee Island, S.W. 32; Smithville, S.W. 32; Cape Lookout, S.W. 42; Cape May, S. 30; New London, S.E. 30; Eastport, N.W. 40; Mt. Washington, S.E. 58 miles.

No. III.—6th, at midnight the barometer at Portland, Oregon, reached its minimum, 29.73, or 0.34 below the normal. Clear or partly cloudy weather prevailed in the Pacific States. At Mare Island, Cal., the S. W. wind attained an hourly velocity of 62 miles at 5 p. m. 7th, the pressure began diminishing in the Northwest. 8th, threatening weather, with generally light rains, was reported from Kansas northward. 9th, it increased in extent and force, with heavy rains in the Ohio valley. In Georgia, South Carolina and Virginia severe thunder-storms and tornadoes are reported to have been produced. In Richmond county, Ga., tornado swept across lower end of Georgia railroad; vicinity of Harlem and Belair, terrible storms, houses, fences and stationary cars blown over; at Belair, large cotton factory demolished and crops ruined; near Berzelia every outhouse blown down. In Columbia county, Ga., hailstones weighing from 1 to 3 pounds, killing cattle and hogs. In South Carolina, Currytown almost swept away; along Charlotte and South Carolina railroad, cars overturned, houses blown down, crops and cattle destroyed; several deaths reported. Vicinity of Petersburg, Dinwiddie county, Va., four distinct thunder-storms from 4 p. m. to midnight, accompanied by heavy wind, hail, incessant lightning and tremendous rain-fall, trees uprooted; crops in adjoining counties suffered severely. At Town Creek, N. C., severe hailstorm. Midnight barometer at

Cincinnati 29.41, or 0.52 below normal. 10th, the rain-area reached from the Eastern Gulf and Atlantic States to the Lower Lakes, with frequent high winds and gales. 11th, it moved northeastward at some distance off the coast, preceded by easterly gales. Midnight barometer at Sydney, C. B., 29.54, or 0.44 below the normal. Signals ordered the 9th along the Lower Lakes and coast from North Carolina to Massachusetts were justified, except on Lake Ontario; those ordered the 10th on the coast of Maine were not justified. Maximum velocities:—San Francisco, SW. 34; Pike's Peak, N. 40; North Platte, NW. 36; Louisville, S. 30; Sandusky, NE. 35; Capes Lookout and Hatteras, SW. 32; Cape May, S. 27 and N. 44; Sandy Hook, E. 40; Boston, NE. 28; Mt. Washington, SE. 58 miles. At Accotink, Va., the wind is reported to have increased to hurricane force, from the east, at 1 a. m. of the 10th.

No. IV.—After the previous disturbance had passed eastward from the Pacific coast the pressure again began diminishing in California. 9th, a. m. barometer at San Francisco, 0.15 below normal. At Austin, Nev., thunder-storms prevailed all night; at Virginia City, considerable hail. 10th, barometer at San Francisco, 0.17 below normal. Light rains occasionally fell in California, Nevada and western Montana; on Pike's Peak, sleet. 11th, falling barometer and increasing southeasterly winds, over the country west of the Mississippi, indicated its approach. Light rains fell from Dakota to New Mexico and western Texas. 12th, it moved southward over Kansas. Threatening and rainy weather prevailed from Utah, Montana and western Dakota to Indian Territory and Missouri, with frequently heavy thunder-storms; also from the Western Gulf States to the Lower Ohio valley. 13th, rainy weather continued from Montana and Dakota southeastward to the Gulf States. 14th, thunder-storms were frequent in the Gulf States and Tennessee. Maximum velocities:—Mare Island, Cal., SW. 56; Santa Fé, E. 26; North Platte, S. 46; Dodge City, S. 44; Pike's Peak, NW. 44; Bismarck, SE. 48; Indianola, S. 29 miles. For six days previous to the 15th a vessel was detained off San Francisco by heavy gales.

No. V.—14th, advanced southeastward over Dakota, with rainy weather thence to Minnesota, and at places gales. 15th, frequent rains accompanied it in the Upper Mississippi valley and Upper Lake region, with very brisk winds. 16th and 17th, as it passed eastward to the north of the stations, a barometric trough formed to the southwestward, in which frequent, but generally light, rains fell. Signals were ordered the 16th for the New Jersey coast, and 17th for the North Carolina coast, and justified. Those for the southern New England coast were not justified. Maximum velocities:—Pike's Peak, SW. 45; Bismarck, W. 36; Breckenridge, SE. 48; North Platte, S. 30; Dodge City, NE. 38; Fort Sill, NE. 50; Kittyhawk, SW. 28; Cape May, S. 30; Sandy Hook, SW. 27 miles.

Nos. VI and VII.—While the pressure continued low, with frequent rains and thunder-storms, in Texas and Indian Territory the 15th and 16th, after the passage of the two preceding low-pressure areas, it also began decreasing from Oregon southeastward; midnight barometer at Salt Lake City 0.19, and at Virginia City 0.18, below normals. 17th, rainy weather prevailed from the Gulf States to Kansas, Missouri and the Ohio valley. 18th, frequent rains continued from the Southwest to the South and Middle Atlantic States. At Mooringsport, (near Shreveport,) La., a destructive thunder and hail-storm was produced. 19th, the northeasterly winds on the North Carolina coast increased to gales, and the signals ordered the 17th inst. were justified but lowered too soon. Maximum velocities:—San Francisco, SW. 32; Umatilla, Or., SW. 28; Salt Lake City, E. 32; Pike's Peak, NE. 44; Vicksburg, S. 32; Cape Lookout, NE. 35; Kittyhawk, NE. 33 miles.

No. VIII.—17th, light rains fell in Montana and western Dakota, accompanying thunder-storms. 18th, they extended into Minnesota with increasing winds. 19th, as the centre moved eastward a barometric trough extended southward. On its western side the gradient was steep, resulting in northwesterly gales, severe thunder-storms, and hail at places. 20th, it progressed slowly to the eastward, producing heavy rains and gales over the Upper Lake region. On Lake Michigan many vessels suffered severely. Midnight barometer at Alpena 29.49, or 0.39 below normal. 21st, a. m. barometer at Toledo and Port Huron, respectively, 29.47 and 29.45, or 0.46 and 0.45 below normals. Threatening and rainy weather prevailed from the Lakes to the Eastern Gulf, South and Middle Atlantic States, with high winds and gales at many places. 22nd, the rain-area covered the Middle States, New England, Lower Lakes and Lake Huron, with increasing winds on the coast. 23rd to 25th, while progressing northeastward, frequent rains and high winds accompanied it. Signals were ordered the 20th along the Upper Lakes, but rather late; 21st, along Lake Erie, the North Carolina and New Jersey coasts, which were partly justified; 22nd, along the southern New England coast and at Eastport, also partly justified. Maximum velocities:—Bismarck, SW. and N. 36; Pike's Peak, N. 48; Dodge City, N. 36; Leavenworth, S. 36; Escanaba, N. 34; Milwaukee, W. 28; Cape Lookout, SE. 36; Sandy Hook, SE. 28; New London, SE. 33; Thatcher's Island, SE. 32; Eastport, SE. 32; Quebec, NE. 32; Mt. Washington, SE. 68 and NW. 75 miles.

No. IX.—21st, p. m. barometer at San Francisco fell to 29.79, or 0.18 below normal, with high SW. wind. 22nd, light rains were occasionally reported from Arizona and New Mexico to Idaho and Montana, with high SE. wind at Pioche, Nev. The lowest pressure advanced northeastward toward Oregon; p. m. barometer at Portland 0.18 below normal. 23rd, began advancing toward the Northwest, with occasional light rains and high winds from New Mexico to Nevada, Oregon, Idaho and Montana, and with heavy rains and southerly gales in western Nebraska. 24th, the central disturbance reached Manitoba, with a barometric trough reaching southward beyond Indian Ty., in which frequent rains and high southeasterly winds shifting to northwesterly prevailed. 25th, occasional rains fell in the Southwest, and frequent rains with high winds

in the Northwest. 26th, a. m. barometer at Marquette 29.60, or 0.26 below normal. The centre passed northeastward into Canada, followed at places by high SW. or NW. winds over the Upper Lakes and Lake Erie. Not any Signals were displayed. Maximum velocities:—San Francisco, SW. 26; Pioche, SE. 26; Umatilla, Or., W. 36; Salt Lake City, E. 36; Virginia City, SW. 32; Pike's Peak, W. 64; Denver, N. 33; North Platte, S. 50 and NW. 48; Bismark, NW. 45; Pembina, SE. 31; Milwaukee, W. 30; Cleveland, S. 28 miles.

No. X.—After high pressure No. VII had passed southeastward from Oregon on the 25th, the pressure rapidly diminished on the Pacific coast and reached its minimum the 26th; p. m. barometer at San Francisco 0.18 below normal. 27th, high winds prevailed in the afternoon at San Francisco and Red Bluff, Cal. The central depression advanced northeastward toward Dakota. 28th, p. m. barometer at Salt Lake City, 0.25 below normal. Occasionally light rains fell from Oregon and Nevada to the Northwest, with frequent high winds and gales; also frequent rains in the Southern States. 29th, the centre continued northeastward over Manitoba, with a deep barometric trough extending southward over Texas, in which heavy rains and high winds or gales were frequent. The a. m. barometer at Bismarck read 0.36 below normal. 30th, the barometric trough advanced eastward and at midnight reached from Lake Superior southwestward to Texas. Maximum velocities:—San Francisco, SW. 30; Red Bluff, NW. 27; Winnemucca, W. 41; Salt Lake City, NW. 32; Pike's Peak, NW. and SW. 44; Denver, SE. 33; North Platte, SE. 60 and NE. 44; Dodge City, S. 40; Bismarck, W. 36; St. Louis, S. 30; St. Paul, SE. 30 miles.

## INTERNATIONAL METEOROLOGY.

*February, 12th*—54° 52' S., 64° W., severe SW. gale. 18th, 11 a. m., off west end of Wollaston Island, Patagonia, "very hard blow" from WSW.

*March, 3rd*—41° 23' N., 66° W., fresh gale, heavy rain, SW. squalls and heavy sea. 22nd, off Cape of Good Hope, heavy westerly gales, lasting ten days.

*April, 8th*—38° 31' S. (?), 31° 28' W., terrific NE. hurricane. 9th, 32° S., 29° W., very heavy "pampero" lasting 21 hours, lost sails, swept decks, bulwarks stove, &c.; 41° S., 37° W., bark "Spirit of the Morning" had chief officer washed overboard and drowned. 19th, off Port of San Nicolas, Parana river, S. A., gale. 22nd, Mauritius, Indian ocean, from 23 to 28 inches of rain fell at a few stations in the southern part of island, in about 14 hours. 30th, 53° 20' N., 30° W., heavy gale from NW. to WSW., lasted to May 17th.

*May, 2nd*—Paramaribo, Dutch Guiana, S. A., 11 a. m. to 12.10 p. m., E. gale. 4th, Off Tonala, Mex., Schr. "Farragut" parted anchor, drove ashore, and became total wreck during a "Norther". 4th to 9th, port of Rio Janeiro, S. A., heavy SE. sea, swell inside port greater than known since 1855; nearly all vessels dragged anchors, one brig wrecked. 12th, while on Saya de Mahla Banks, bark "Leontitia," (whaler,) experienced hurricane lasting 42 hours. 15th, 35° 50' N., 67° 43' W., 9 a. m., SE. gale, thick weather and heavy seas; 2 p. m. increased to hurricane, veered to SW. with violent squalls, seas making clean breach over ship; 6 p. m. moderated and veered to WSW.; ship steered ENE. before sea during 16th with falling barometer and increasing winds; 17th, fearful seas, crew lashed to pumps, 8 a. m. gale moderating. Bark "Advocate" left New York, 13th; was struck by hurricane on the 15th; lost all 3 masts afternoon of 16th, and was abandoned 17th 100 miles E. of Sandy Hook. 16th, 180 miles N. of Bermuda, revolving gale lasting four days, lost jib-boom, fore and main-masts, &c. 18th to 20th, 45° N., 59° W., very heavy gale. 20th, 40° 45' N., 56° 49' W., 7.35 a. m., (Wash. M. T.) moderate NE. gale, barometer 29.93; Turks' Island, Bahamas, heavy sea. 25th, 35° 18' N., 60° 20' W., heavy sea and squally. 26th, 35° 3' N., 15° 28' W., fresh NE. gale and heavy sea. 27th, 54° 47' N., 19° 33' W., NW. and NE., squally; 49° 50' N., 17° 22' W., WNW., fog, rain and high sea. 28th, 54° 00' N., 28° 08' W., NE. and SE. squally; 49° 16' N., 23° 13' W. NW., W., stormy; Paramaribo, Dutch Guiana, S. A., 3.45 to 4.15 p. m., E. and NE. gale, with heavy rains. 29th, 49° 11' N., 31° 55' W., SSE. and E. fresh gale; 54° N., 32° W., strong gales and high sea. 30th, 47° 18' N., 37° 57' W., high westerly sea; 46° 11' N., 39° 11' W., strong W. wind and high westerly sea; 49° 58' N., 16° 08' W., increasing SE. wind; Paramaribo, Dutch Guiana, S. A., 2 to 3 p. m., E. and NE. gales, with heavy rains. 31st, 47° 56' N., 44° 0' W., W. heavy squall, thick fog; 50° 37' N., 25° 18' W., fresh S. by E. gale, high sea; 45° 17' N., 42° 53' W., fresh WNW. gale, high W. sea; 44° 42' N., 43° 38' W., NW. storm, rain-squalls, very high sea; 49° 36' N., 24° 41' W., SE. wind increasing to moderate gale; 37° 50' N., 69° 30' W., heavy SE. gale. Valparaiso, S. A., bark lost foremast in "norther."

*June, 1st*—49° 02' N., 33° 11' W., SSW. to W. squalls; 48° 56' N., 32° 12' W., heavy W. sea. 2nd, 49° 33' N., 39° 43' W., NNW. strong gale, high W. sea; 46° 44' N., 38° 26' W., NW. stormy; 49° 09' N., 9° 29' W., SSW. rain-squalls. 3rd, 48° 06' N., 36° 20' W., NW. strong winds and squalls; 48° 50' N., 17° 39' W., rain squalls; Island of Jamaica, W. I., heavy showers, in some districts estimated at seven inches. 4th, 47° 19' N., 44° 30' W., N. to NW. squally; 47° 58' N., 25° 12' W., W. to S. wind and sea increasing. 5th, 48° 55' N., 32° W., SW. squally; 47° 25' N., 31° 52' W., SW. stormy, rain and heavy sea; 49° 25' N., 7° 33' W., fresh W. gale and rough sea. 6th, 48° 30' N., 42° 49' W., NE. to N. strong winds, squally, rain; 46° 08' N., 39° 12' W., NNW. squally; 45° 28' N., 38° 36' W., fresh NW. gales, rain; 48° 55' N., 15° 13' W., W. and SW. wind and sea increasing, heavy rain during morning. 7th, 48° 27' N., 23° 01' W., SSW. winds and high westerly swell during morning, SE. to NE. rain-squalls during evening. 8th, 43° 54' N., 56° 45' W., heavy W. swell. 9th, 41° 50' N., 60° 25' W., NW. and SSW. squally, rain; 40° 33' N., 66° 55' W., 3